

## Claims

1. A method of manufacturing a magnetic disk for use on a magnetic storage device comprising:

    writing a set of servo tracks on the magnetic disk, the set of servo tracks including a track zero;

    placing the disk on a hub for spinning the disk;

    spinning the disk at a selected rate;

    observing the track zero on the magnetic disk using Kerr effect microscopy device; and

    measuring a first distance from a predetermined point to a first selected point on the track zero.

2. The method of claim 1 further comprising the step of measuring a second distance from a predetermined point to a second selected point on the track zero where the selected second point is 180 degrees around the disk from the first selected point.

3. The method of claim 2 further comprising the step of measuring a third distance from a predetermined point to a third selected point on the track zero where the selected third point is 90 degrees around the disk from the first selected point.

4. The method of claim 1 further comprising the step of measuring second, third and fourth distances from a predetermined point to a second, third and fourth selected points on the track zero where the selected second point is 90 degrees around the disk from the first selected point, the third selected point is 180 degrees around the disk from the first selected point and the fourth selected point is 270 degrees around the disk from the first selected point.

5. The method of claim 4 further comprising the step averaging first, second, third and fourth distances to obtain a single measurement indicative of a position of track zero on the magnetic disk.